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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 2281-001-03	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on <u>November 6, 2006</u> Signature <u>Jamie Vrsek</u> Typed or printed name <u>Jamie Vrsek</u>		Application Number 10/658,803	Filed 09/09/2003
		First Named Inventor Partho Sarkar	
		Art Unit 1745	Examiner Raymond Alejandro
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <p><input type="checkbox"/> applicant/inventor.</p> <p><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</p> <p><input checked="" type="checkbox"/> attorney or agent of record. 42,118 Registration number _____</p> <p><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</p> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> <p><input type="checkbox"/> *Total of _____ forms are submitted.</p>			

Signature
Paul F. RusynTyped or printed name
(425) 455-5575Telephone number
November 6, 2006

Date

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor Partho Sarkar Confirmation No.: 1819
Title: CRACK-RESISTANT ANODE-SUPPORTED FUEL CELL
Application No. 10/658,803
Filed September 9, 2003
Examiner/Art Unit: ALEJANDRO, Raymond / 1745
Attorney File No. : 2281-001-03

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited in the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, MS AF, P.O. Box 1450, Alexandria, VA 22313-1450, on this 6th day of November, 2006.

Signature

REASONS FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Sir:

In accordance with the accompanying Pre-Appeal Brief Request for Review, Applicant submits the following:

Claims 1-12 are currently pending in the present patent application.

In an Advisory Action mailed 17 October 2006, the Examiner indicated the Response to Final Office Action filed on 11 October 2006 failed to place the present application in condition for allowance. The Examiner indicated the proposed amendments to claims 1 and 12 "raised new issues that would require further consideration and/or search.

A Notice of Appeal has been filed in the present application at the same time as this request. Pre-Appeal Brief review of the legal and factual bases of the rejections by the Examiner is requested. As will now be discussed in more detail, the rejections are clearly not proper and are without legal and factual bases.

Pending claims 1-9, 11, and 12 stand rejected as being anticipated by the Shibata reference. The Examiner points to paragraph 69 of Shibata as disclosing a solid oxide fuel cell (SOFC) unit cell having a porous base body 1 which includes a ceramic (alumina) body plated with Ni, an electrode 10, an electrolyte 12, and an electrode 11. The Examiner asserts that the base body 1 material (alumina) may be considered an anode support layer comprising a porous oxygen ion conducting structure suitable for solid oxide fuel cell use as recited, for example, in claim 1. This is clearly a legal and factual error by the Examiner.

The alumina base body 1 disclosed in Shibata functions to collect current and provide mechanical support. In contrast, an anode support layer as is known in the art serves to provide mechanical support and function as an anode, i.e. to conduct oxygen ions and electrons in a manner suitable for SOFC operation. Examples of scientific literature that accompanied the Response to Final Office Action illustrate that alumina's resistivity is too high for this material to be considered a solid electrolyte and an oxygen ion conductor suitable for use as an anode in a SOFC. In order for a material to be considered an oxygen ion conductor suitable for SOFC use in an anode, the material must provide the necessary and efficient ionic path for anodic reaction which takes place during SOFC operation. As is well known in the fuel cell art, ionic conductivity of the anode of a SOFC must be comparable to the ionic conductivity of the electrolyte,

and thus alumina's resistivity is also too high at SOFC operating temperature to carry out SOFC anode function.

The Examiner's assertion that because alumina must exhibit at least a minimal ion conductivity, the base body 1 of Shibata may be considered to correspond to the anode support layer of the present application is clearly in error. Materials are classified as having physical characteristics that result in each material being placed in a particular class of materials, such as an electric or thermal conductor or insulator or an ionic conductor or insulator. Materials are not classified in absolute terms as is suggested by the Examiner. The Examiner requests evidence that "ceramic alumina is INCAPABLE of transporting ions (no ion conduction at all)." See page 3 of the Interview Summary. No such evidence can be provided for any material. Although classified as a particular type of material, every material will exhibit some characteristics of another class of materials. For example, materials classified as electrical insulators exhibit some amount of electrical conductivity, but such conductivity is so small that these materials are nonetheless classified as insulators. If the Examiner's argument was accepted, then the classification of materials would be rendered pointless. Any material could be said to be whatever type of material was needed by an Examiner when formulating a rejection.

The Examiner has during examination the pending claims expressly cited the well known tenet of patent examination that claim terms must be given their broadest reasonable interpretation consistent with the specification. As expressly set forth in Section 2111, the "broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach." As evidenced by the technical literature that accompanied the Response to Final Office Action, one skilled in the art would not interpret the phrase "ion-conducting structure" to include the insulating material of alumina ceramic. The Examiner's attempt to so interpret this phrase is, simply put, an unreasonable interpretation of this claim language, and is directly contrary to this section of the MPEP as well as being contrary to common sense.

Note that while the above discussion deals with particular disclosure in the Shibata reference, this discussion is not directed to the interpretation of this reference. It is a fact that Shibata discloses alumina ceramic for the base body 1, and the question is whether this insulating material may be considered an "oxygen ion-conducting structure suitable for solid oxide fuel cell use" as recited in the claims.

In conclusion, pre-appeal brief review of the present application is requested and is warranted for the reasons set forth above. Please contact the undersigned if, upon consideration of this document, there are any questions concerning this request. In the event any additional fees associated with this document are due, the USPTO is hereby authorized to charge such payment to Deposit Account No. 07-1897.

DATED this 6th day of November, 2006.

Respectfully submitted,

GRAYBEAL JACKSON HALEY LLP

A handwritten signature in black ink, reading "Paul F. Rusyn". The signature is fluid and cursive, with the first name "Paul" and last name "Rusyn" clearly legible, and "F." as a middle initial.

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